

## **REMARKS/ARGUMENTS**

Reconsideration of this application, in view of the following remarks and arguments, is respectfully requested.

Claims 1-49 are currently pending in this application. In his December 30, 2004 Office Action the Examiner rejected Claims 1-8, 10, 11, 13-22, 24, 25, 27-37 and 39-48 under 35 USC §102(b) as being anticipated by U.S. Patent 3,112,234 to Krupp, and rejected Claims 9, 12, 23, 26, 38 and 49 under 35 USC §103(a) as being unpatentable over Krupp. These rejections are respectfully traversed for the following reasons.

Via independent Claims 1, 15, 28 and 39, each of the present applicant's Claims 1-49 requires, in one manner or another, an **open weave** reinforcing patch used in conjunction with a filament-based tank structure.

Applicant defines the claim term "open weave" patch in his specification, beginning on line 17 of page 7 thereof, as follows:

A portion of one of the individual single layer, **open-weave** patches 38 is shown in FIG. 4. Representatively, each patch member 38 may be formed from a variety of suitable materials such as, for example, fiberglass, carbon, kevlar, etc. **As can be seen in FIG. 4, each patch member 38 has a spaced series of parallel individual strands 40 secured at an angle (representatively ninety degrees) to another spaced series of parallel individual strands 42, with substantial through-holes 44 bordered by the individual strands 40,42 being present in the patch 38.** (Emphasis Added)

This definition comports with the universally accepted understanding of both of the terms "woven" or "weave" (i.e., requiring both warp strands extending in a first direction and weft strands extending in a second direction at an angle to the warp strands), and

“open weave” (i.e., having substantial through-holes bordered by warp and weft strands of the woven material).

In U.S. Patent 3,112,234 to Krupp, with respect to the reinforcing patch 77, it is stated in lines 37-48 of column 9 of the specification that:

To provide openings at locations other than at the pole portions of the article, thin annular reinforcing patches 77, as shown in FIG. 8, may be wound between the layers of the windings. These patches may themselves be, and preferably are, **segments of a filament wound article in which the filaments are wound according to the lengthwise winding technique described in the foregoing**. Alternatively, such patches 77 can be made up of tapes or filaments laid one upon the other in progressively tangential engagement with the central opening in the patch. The patches may also be molded plastic, rubber, or metal rings. (Emphasis Added)

The wound filament material referred to in this description of the Krupp patch 77 is described in lines 5-8 of column 2 of the Krupp specification as follows:

The filamentary material is preferably trained to the winding form as a **weftless tape** composed of a series of **laterally abutting** strands under controlled tension. (Emphasis Added)

The non-woven characteristic of the winding material F, which has a construction similar to that of the illustrated Krupp patch construction, may also be seen in FIGS. 4a and 4b of Krupp. Thus, the illustrated patch 77 in Krupp is clearly not of a **woven** construction since it is **weftless** in both its illustrated preferred embodiment and other mentioned potential embodiments. Further, the patch 77 is not of an **open** material construction since the strands in the weftless tape **laterally abut one another**.

Krupp thus clearly fails to disclose the open weave reinforcing patch as specified in each of the present applicant's Claims 1-49. Not only does the Krupp reference fail to disclose the present applicant's claimed open weave reinforcing patch, but it specifically teaches **directly away from** this claimed reinforcing patch construction. In this regard the Examiner's attention is respectfully directed to column 9, lines 37-50 of the Krupp specification wherein the variously mentioned possible constructions of the patch 77 are all of **solid, non-woven** constructions as opposed to the **open weave** patch construction of the present applicant's reinforcing patch structure specified in the present applicant's Claims 1-49.

It is thus respectfully submitted that none of applicant's Claims 1-49 is anticipated or in any manner rendered obvious by U.S. Patent 3,112,234 to Krupp.

In view of the foregoing remarks and arguments, all of the claims currently pending in this application are now seen to be in a condition for allowance. A Notice of Allowance of Claims 1-49 is therefore earnestly solicited.

The Examiner is hereby requested to telephone the undersigned attorney of record at 972/516-0030 if such would further or expedite the prosecution of the instant application.

Respectfully submitted,

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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450,

on January 5, 2005  
Diane Sutton